STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

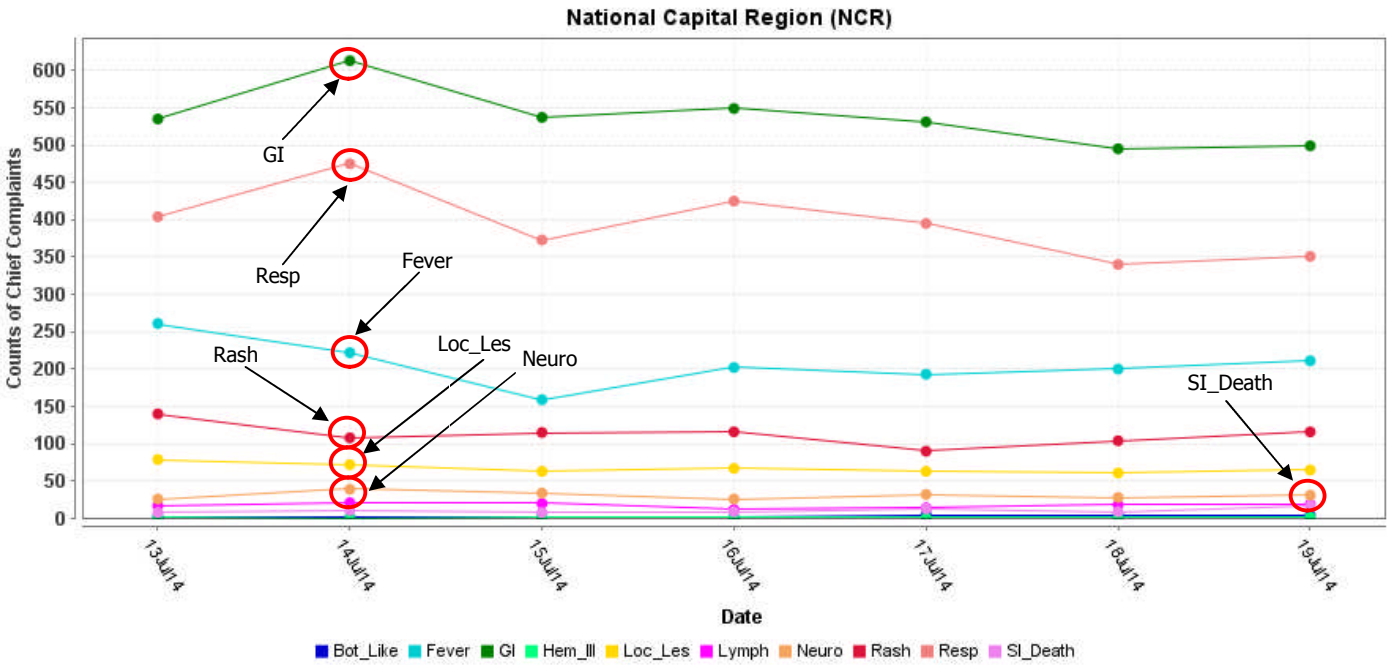
July 25, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:29
Reporting for the week ending 07/19/14 (MMWR Week #29)

CURRENT HOMELAND SECURITY THREAT LEVELS

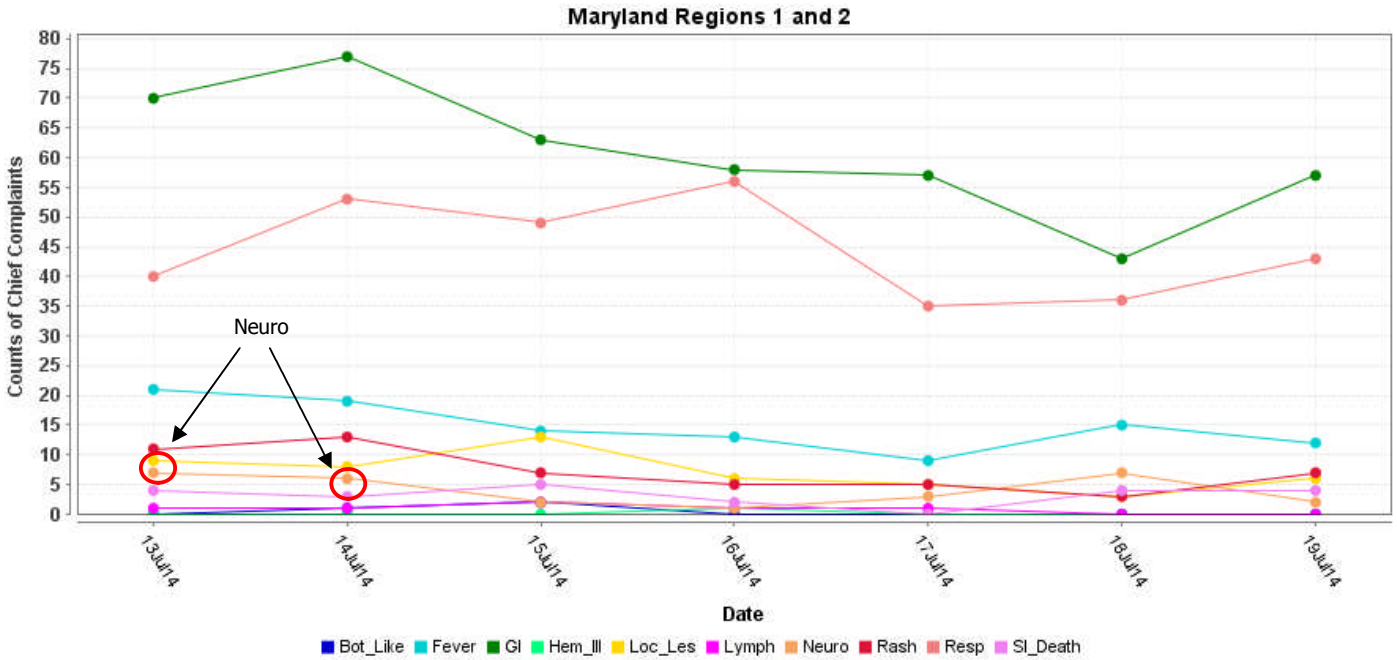
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

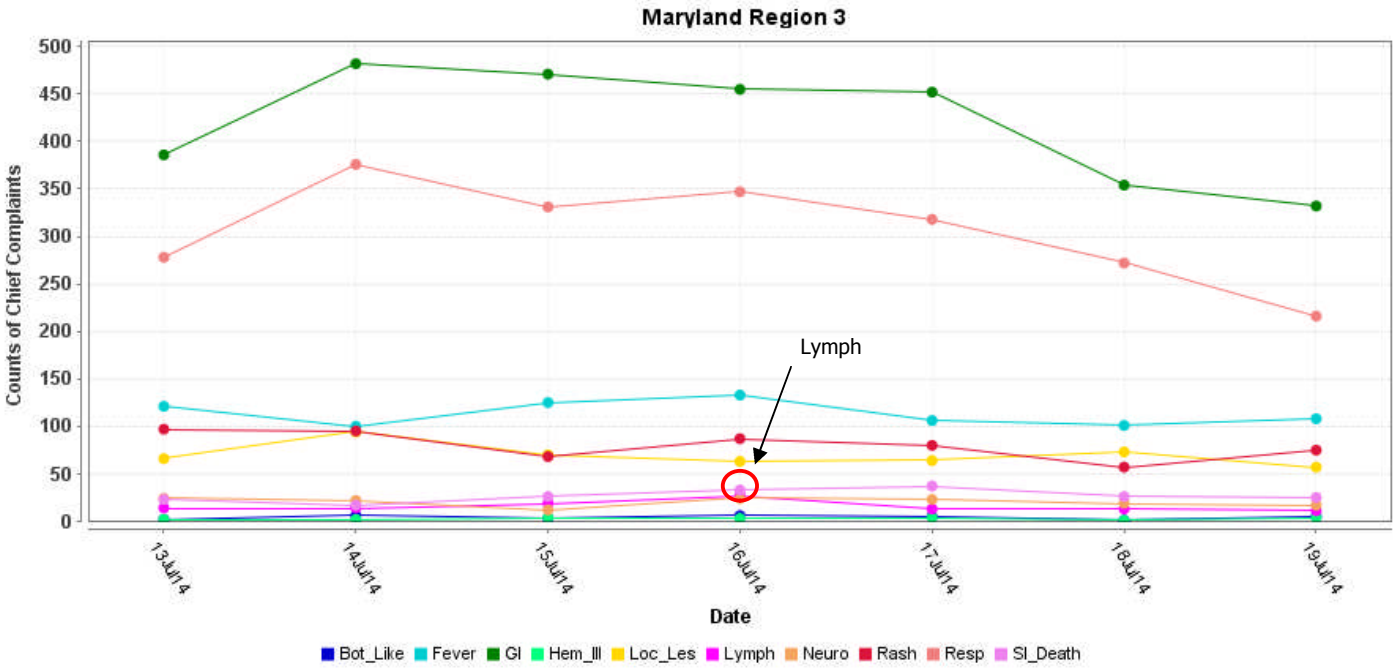


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

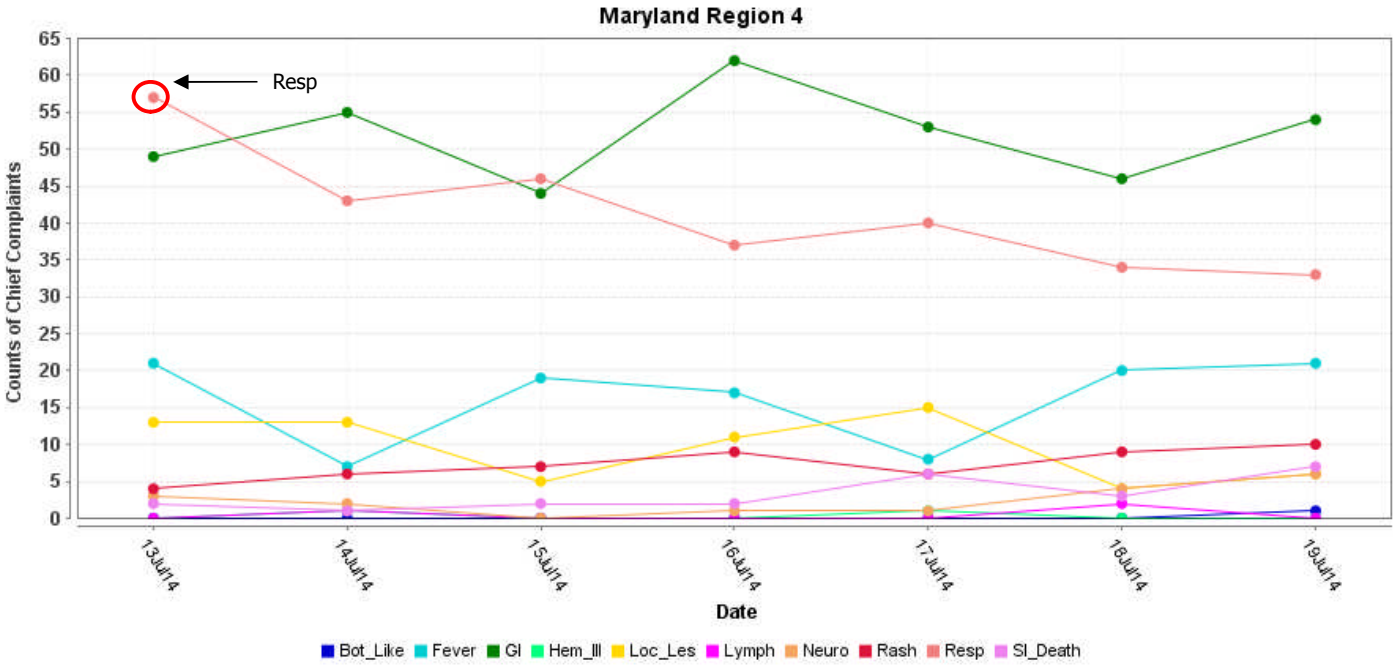
MARYLAND ESSENCE:



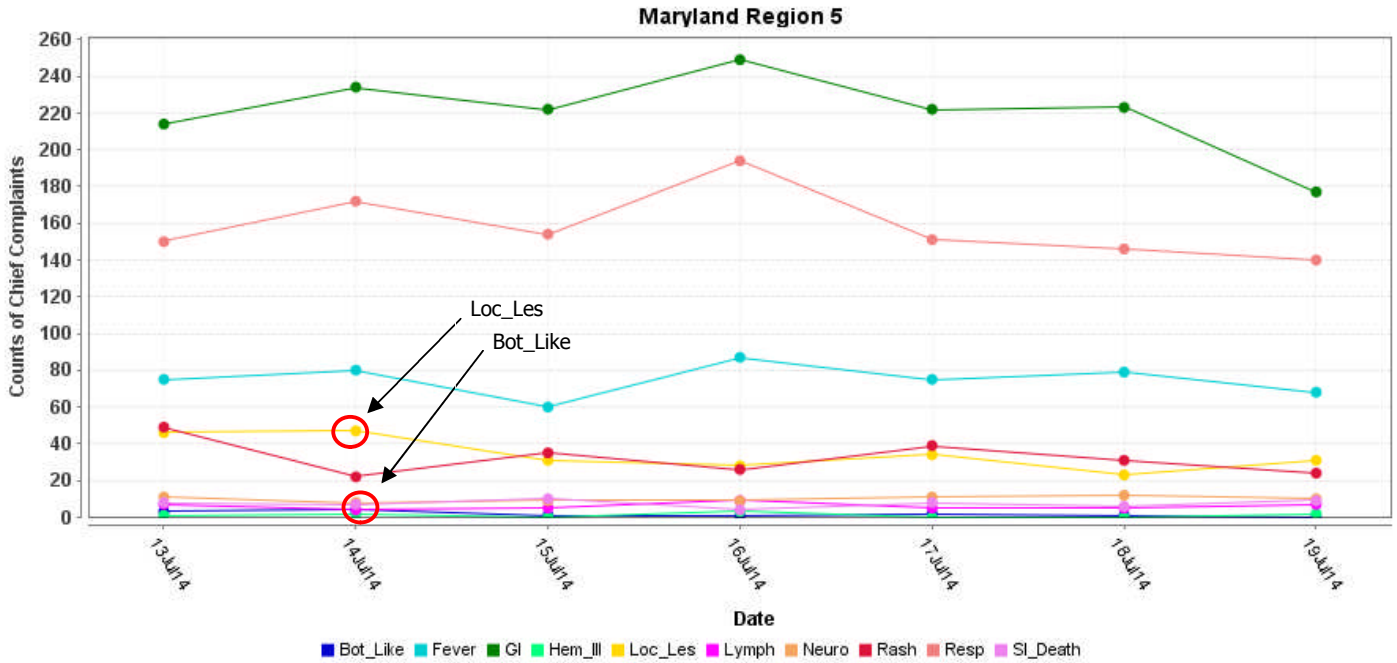
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE

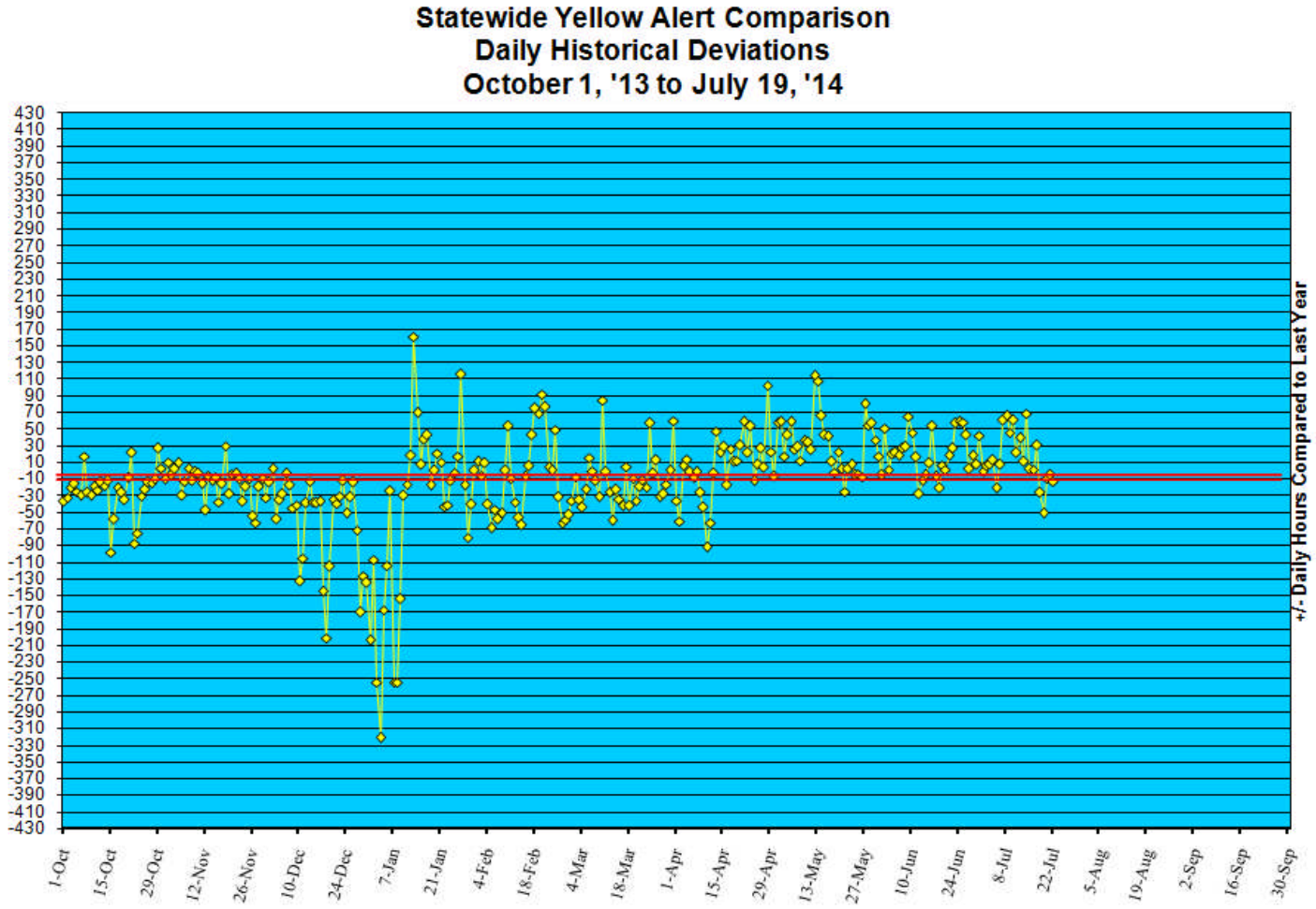


* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION



YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (July 13 - July 19, 2014):	8	0
Prior week (July 6 - July 12, 2014):	4	0
Week#29, 2013 (July 14 - July 20, 2013):	6	0

3 outbreaks were reported to DHMH during MMWR week 29 (July 13-19, 2014).

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS associated with a Sports Team

2 Foodborne outbreak s
2 outbreaks of GASTROENTERITIS/FOODBORNE associated with Restaurants

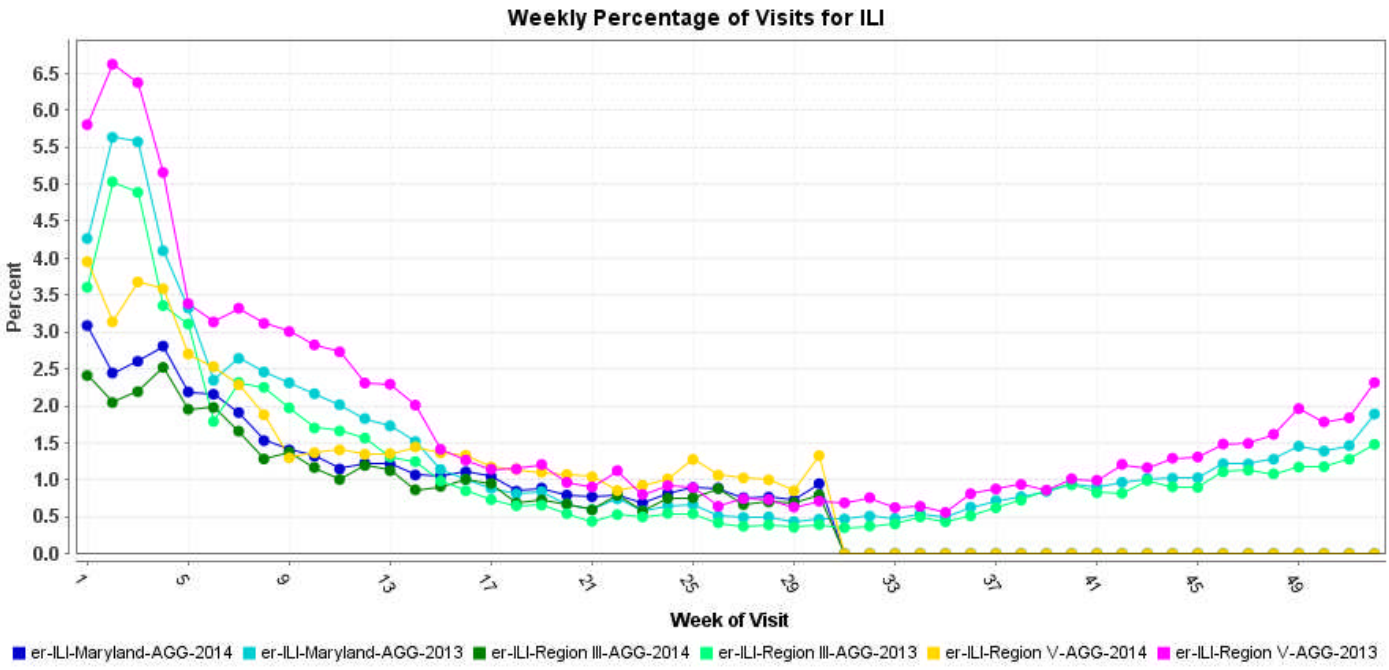
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

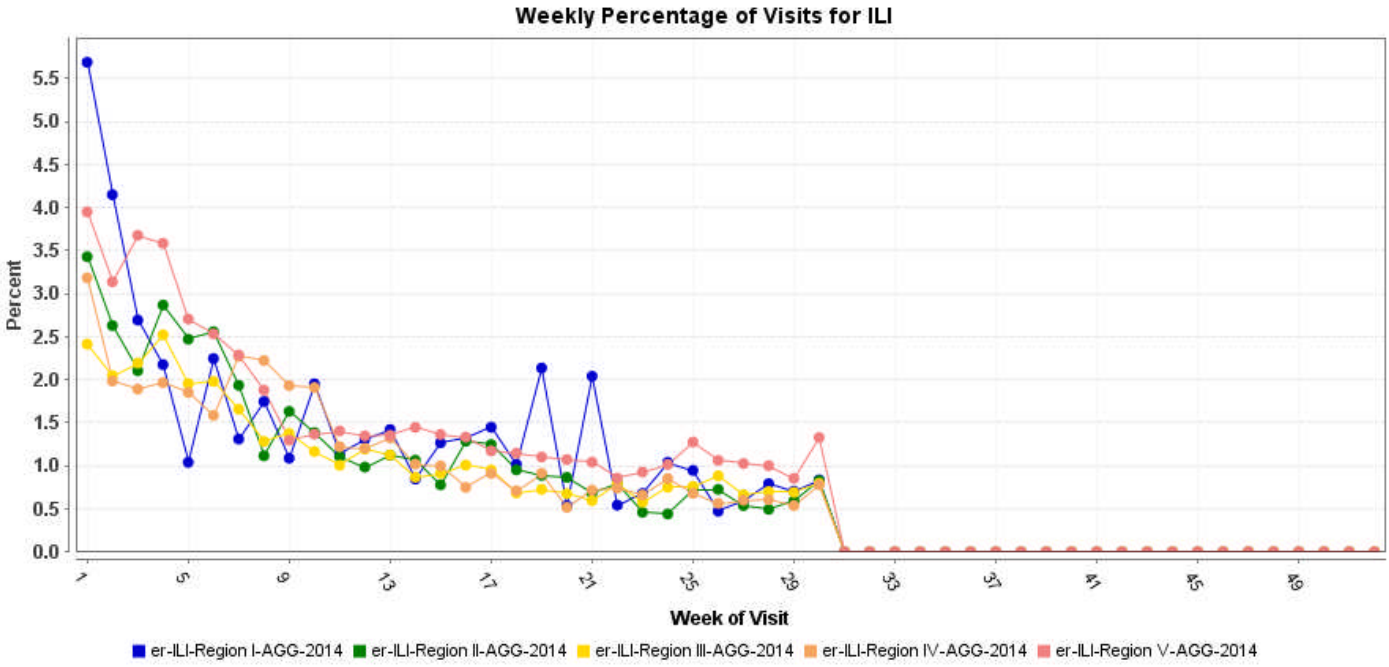
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



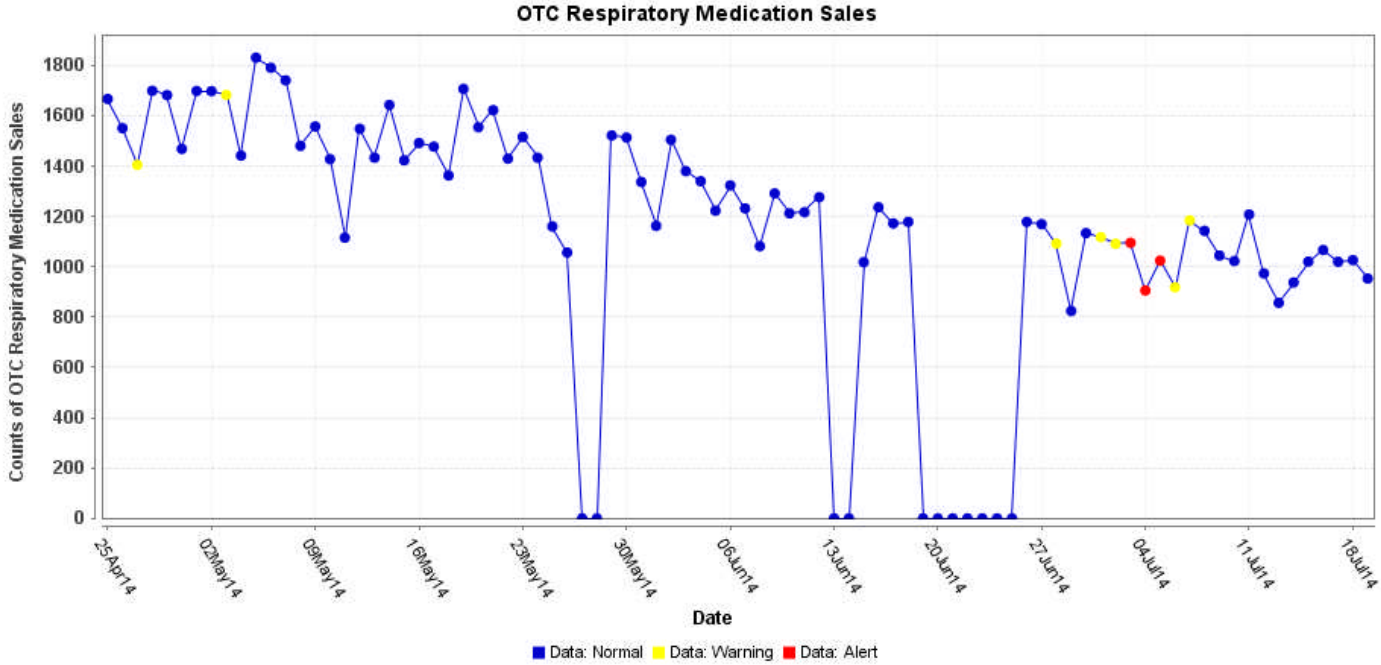
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

HANTAVIRUS (TEXAS): 14 July 2014, State health officials are asking Texans to be careful around rat and mice nests after confirming 2 more cases of hantavirus [pulmonary syndrome, HPS] this month [July 2014]. The Texas Department of State Health Services reported a total of 3 cases so far this year, one in the Texas Panhandle and 2 in the South Plains area [in northwest Texas]. Texas had one case last year [2013], and no cases were reported from 2009 to 2012, according to the state. 1/3rd of cases reported to the state health department since 1993 have resulted in death. Infected rats and mice shed the virus in their urine, droppings and saliva, which contaminate dust and nesting materials that humans breathe in. Health officials recommend sealing openings to homes and workplaces while removing food sources and piles of items that attract rats and mice. If nests are found, the area should be ventilated for at least 30 minutes and then dampened using a 1-to-10 bleach-water mixture twice, according to the state. Goggles and masks are recommended. HPS symptoms include fatigue, fever muscle aches at 1st, followed by headaches, chills, diarrhea, abdominal pain, coughing and shortness of breath. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect cases

E. COLI (MINNESOTA): 15 Jul 2014, State health officials are investigating an apparent E. coli outbreak that has sickened 13 Minnesotans and sent 4 to the hospital. 7 of the patients reported eating at Applebee's restaurants in Woodbury [Washington County], Roseville [Ramsey County], Blaine [Anoka County], Monticello [Wright County] and Duluth [Saint Louis County] between 24-27 Jun 2014, the Minnesota Department of Health said Monday, 14 Jul 2014. But there are also several cases with no apparent connection to the restaurant chain, indicating the illnesses may have resulted from a widely distributed food product. The 4 hospitalized patients, all of whom reported eating at Applebee's, were treated mostly for dehydration and have now been discharged, according to Stephanie Meyer, a Health Department epidemiologist. All 13 patients, ranging from ages 16 to 84, have recovered or are recovering. According to health officials, this form of E. coli 0111 is in the same family as the more well-known E. coli 0157:H7. About 10 outbreaks of these strains E. coli are reported in Minnesota every year, Meyer said, and the state usually sees about 20 to 30 cases of E. coli 0111 total each year. "To see 13 all at once is unusual," Meyer said. "We don't know what that means yet." Several of the patients reported eating Applebee's Oriental chicken salad, which contains cabbage, shredded carrots, crispy noodles, almonds and fried chicken. Applebee's is cooperating with the investigation, Meyer said, and has voluntarily pulled the dish from its menu and removed cabbage and shredded carrots from other items. None of the ingredients were exclusive to Applebee's, the restaurant said in a statement Monday, 14 Jul 2014. There are no indications of E. coli risk at Applebee's restaurants outside Minnesota, and all locations outside the state will continue with unmodified menu items. "The fact that we have multiple Applebee's locations indicates that it was food that could have gone to restaurants and elsewhere," Meyer said. The state Department of Agriculture and other regulatory partners are tracing invoices to produce suppliers in an attempt to find any commonalities. Cross-referencing produce shipments with other customers and other E. coli reports can help investigators pinpoint the source of the bacteria, Meyer said. "There could be a large network involved." The investigation could take as little as a week up to a few months, depending on how complex the supply chain is, said Carrie Rigdon, supervisor of the Department of Agriculture Rapid Response Team. There is often a delay between the time a patient notices symptoms and the time the infection is diagnosed and reported to the Health Department, Meyer said, so many more cases could still emerge. (Food safety threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect cases

BOTULISM (NEW JERSEY): 16 Jul 2014, Parents panicked when their 3-month-old baby suddenly became sick and ended up in the hospital. He was diagnosed with botulism, a potentially deadly condition, and getting the treatment wasn't easy. "All you want is your baby to be back to normal," said the baby's mother. But the 3-month-old was lethargic, losing muscle tone, and getting worse. And on 2 Jul 2014, he ended up in intensive care at St. Barnabas Medical Center [Essex County, New Jersey]. "His cry was weak, he wouldn't eat, he was miserable," the mother said. The baby had no fever, normal blood work, and wanted to eat but couldn't. Chief of Infectious Disease Dr. Uzma Hassan says those are clues that led her to diagnosis of botulism. "Botulism is a very serious illness. Botulism toxin is the most potent neurotoxin known to man," said Dr. Uzma Hassan, of St. Barnabas Medical Center. The toxin paralyzes muscles, leaving babies unable to eat or breathe. There is a treatment, baby-BIG (botulism immune globulin), but you can only get it from the California Department of Public Health and it costs USD 45 000. For that antitoxin to work, it has to be given within a few days. But the test to confirm the diagnosis can take up to a week. That means doctors have to act fast and make a decision before it's too late. "He needed to get this as soon as possible. He was deteriorating and he was deteriorating really quickly," the mother said. After the treatment, the baby immediately started to get better. Soon after, the test results came back confirming that he had botulism. The condition affects about 100 babies a year. Dr. Hassan says construction and dust may play a role. "It may be that the soil turning around could have triggered a release of spores in the environment," Dr. Hassan said. Botulism spores are also found in honey. That's the reason new parents are told to never give their baby honey. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

PLAGUE (COLORADO): 19 Jul 2014, Three more plague cases were found in Colorado, a week after the 1st infection of the deadliest form of the disease was reported in the state in a decade. The man initially reported with pneumonic plague on 11 Jul 2014 is [still] hospitalized; 2 of the new cases also had pneumonic plague, while the 3rd had a milder form. All 4 cases may be linked to the original man's dog, which died from the illness, state health officials said. The people newly found to be infected were treated with antimicrobials, recovered, and are no longer contagious. Health officials suspect the dog that died may been exposed to plague-infected fleas from a prairie dog or rabbit, said Jennifer House, a spokeswoman for the Colorado Department of Public Health and Environment department. "We've had quite a number of cases this year [2014]," House said in a telephone interview. "We do believe

the outbreak itself to be over." Colorado has had 60 cases of all types of plague since 1957, and 9 people have died. 12 cases of plague have occurred in the past decade in the state. The state's investigation is ongoing, House said. "While this is not a daily, weekly, or monthly occurrence, it isn't without precedence," said Jim Siedlecki, director of public information of Adams County, where the original victim lives, in a telephone interview. "A case of plague where fleas and prairie dogs are involved isn't earth shattering for Colorado." (Plague is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

EBOLA (GUINEA, LIBERIA, SIERRA LEONE): 18 Jul 2014, The current epidemic trend of the EVD outbreak in Sierra Leone and Liberia remains serious, with 67 new cases and 19 deaths reported from 15-17 Jul 2014. Between 15-17 Jul 2014, 67 new cases of EVD, including 19 new deaths, were reported from the 3 countries as follows: Guinea, 0 new cases and 0 deaths; Liberia, 22 new cases with 10 deaths; Sierra Leone 45 new cases and 9 deaths. These numbers include laboratory-confirmed, probable, and suspected cases and deaths of EVD. The EVD outbreak in Guinea continues to show a declining trend, with no new cases reported during this 3 day-period. As of 17 Jul 2014, the cumulative number of cases attributed to EVD in the 3 countries stands at 1048, including 632 deaths. The World Health Organization (WHO) continues to monitor the evolution of the Ebola virus disease (EVD) outbreak in Sierra Leone, Liberia, and Guinea. The World Health Organization has been working with national authorities and partners in the affected countries to analyze and review the current outbreak response. An assessment of the outbreak response conducted in Liberia identified several gaps and challenges. Some of the gaps identified include low coverage of contact tracing; persisting denial and resistance in the community; weak data management; inadequate infection prevention and control practices, especially in peripheral health facilities; and weak leadership and coordination at sub-national levels. Underpinning these challenges were limited financial resources and human technical capacity. Comprehensive mapping of the financial, logistical, and human resource needs will be articulated in the national operational plan under development. This exercise of developing prioritized operational plans is also being conducted in Guinea and Sierra Leone. Following the call for regional collaboration during the Accra Ministerial meeting, the government and the Ministry of Health of Gambia provided a team of 11 health-care workers to support outbreak response in Sierra Leone. While this team will contribute the critical human resource needs, the mission will be crucial for enhancing capacity for epidemic preparedness and response in Gambia. This mission is being supported by UNDP, Gambia, and WHO Sierra Leone. WHO does not recommend any travel or trade restrictions be applied to Guinea, Liberia, or Sierra Leone based on the current information available for this event. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect cases

PLAGUE (CHINA): 18 Jul 2014, A 38-year-old man in the northwestern province of Gansu died of pneumonic plague on Wednesday, 16 Jul 2014, state media reported. More than 150 people who were in contact with the man have been quarantined, the provincial public health authority said in a news bulletin on its website. None of the quarantined has had any symptoms so far. The man was diagnosed with the plague on Thursday, 17 Jul 2014. He became ill after having had close contact with a dead marmot while herding [livestock], the bulletin and Xinhua reported. The patient was taken to hospital in Yumen on Tuesday afternoon, 15 Jul 2014, after developing a high fever. Yumen city, where the patient was being treated, and the man's home village and town along with the pasture where he worked were also in quarantine. Experts have been sent to the affected area. The patient's body was cremated, according to media reports. In August 2009, China reported an outbreak of pneumonic plague in western Qinghai province after a herdsman died of high fever and hemoptysis (coughing up of blood from the respiratory tract), according to WHO records. The source of the outbreak in 2009 was also a wild marmot, the epidemiological investigation showed. (Plague is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (SOUTH SUDAN): 19 Jul 2014, 100 people have died in the South Sudan cholera outbreak, according to the UN's Office for Coordination of Humanitarian Affairs (OCHA). In its weekly situation report, OCHA said there have been 4418 total cholera cases since May 2014, mainly in Juba, Eastern Equatoria, and Upper Nile [states], with a fatality rate of 2.3 percent, [which is] above the emergency threshold. The biggest increase of cholera is in Wau Shilluk, a village in Upper Nile downstream from Malakal, where there have been 793 confirmed cases. To deal with the outbreak in Wau Shilluk, OCHA said that clean water access is being ramped up and volunteers are providing the population with cholera prevention and awareness messages. Aid agencies are also providing soap and hand washing stations. New cholera cases are under investigation in Malakal and Bol, Upper Nile, as well as Kapoeta North, Eastern Equatoria. In Bentiu, Unity State, where there have been suspected but unconfirmed cases, a new site has been prepared for a cholera treatment center. Rains are severely hampering delivery of aid to affected populations, with 90 percent of main roads in Jonglei impassable and 75 percent impassable in Unity State. Insecurity has also slowed distribution of aid, including food. A food distribution to 37 000 people in Nhialdiu, Unity state, was disrupted on Tuesday, 15 Jul 2014, by clashes between pro- and anti-government forces. (Water safety threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect cases

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION

Toll Free 1-877-4MD-DHMH – TTY/Maryland Relay Service 1-800-735-2258
Web Site: www.dhmh.maryland.gov